

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Previously presented) A method for improving utilization in a peer-to-peer network having a plurality of nodes, the method comprising:
 - hosting one or more storage slots in each node in the peer-to-peer network, a first portion of the storage slots hosting storage zones and any remaining storage slots at each node allocated as a free slot reserve storage slot;
 - storing data in the storage slots hosting storage zones; and
 - when a storage slot hosting a storage zone reaches a full capacity of the storage zone,
 - splitting the data in the storage slot hosting the storage zone into a first and second portion,
 - converting a free slot reserve storage slot into a new storage slot hosting a storage zone, and
 - transferring the second portion of the data to the new storage slot hosting the storage zone.
2. (Previously Presented) The method of claim 1 wherein each node is assigned more storage slots than its actual physical capacity allows.
3. (Original) The method of claim 2 wherein each node is allocated $N - 1$ virtual slots for each N storage slots allocated.

4. (Original) The method of claim 2 wherein a storage zone at a node is transferred to another node in the peer-to-peer network if the data inserted into the storage zones at the node fills the actual physical capacity of the node.
5. (Original) The method of claim 4 where a local search for candidate nodes in a transfer set is conducted prior to transfer of the storage zone.
6. (Previously presented) The method of claim 1 wherein the new storage zone is transferred to and hosted by a free slot reserve storage slot on a different node when the storage zones hosted at the node exceed the storage slots allocated at the node.
7. (Original) The method of claim 6 where a local search for candidate nodes in a transfer set is conducted prior to transfer of the new storage zone.
8. (Original) The method of claim 1 wherein the data is associated with hashkeys of a hash function and where each storage zone is responsible for a subset of all hashkeys.
9. (Original) The method of claim 8 wherein the hashkeys are uniformly distributed by the hash function.
10. (Original) The method of claim 1 wherein the storage slots are of a fixed-size.
- 11 – 20 . (Cancelled)
21. (Previously presented) The method of claim 1, wherein each storage zone is hosted by a storage slot located within a particular physical node.
- 22 – 24. (Cancelled).

25. (Previously Presented) The method of claim 1, wherein a zone is hosted within a slot and a size of the slot is a system wide constraint representing the limit size to which a zone can grow before it fills the slot and must be split.

26. (Cancelled).

27. (Cancelled).